City of Oxford.

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH.

SANITARY INSPECTOR'S REPORT.

1903.

Oxford:

PRINTED BY JAMES PARKER AND CO., CROWN YARD.

1904.

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH.

Medical Officer's Department,
Town Hall, Oxford.

To the Members of the City Council.

GENTLEMEN,

I have the honour to present to you a report of the sanitary condition of the district during the year 1903.

Summary of Vital Statistics.

Area in statute acres, 4,719.

Population estimated to the middle of 1903 = 50,146.

Total Births = 1,024 ; rate per 1,000 = 20·42.

Total Deaths = 657 ; rate per 1,000 = 13·1.

Death-rate from the seven chief Zymotic Diseases = 0·578.

Deaths under one year, rate per 1,000 Births = 94·7.

Percentage of Deaths not medically certified = 1·97.

Death and Birth-rates in England and Wales, &c. Oxford is placed among the 103 towns :—

	Birth Rate.	Death Rate.	Zymotic Death Rate.	Infants under one year; rate per 1,000 Births.
England and Wales	28·4	15·4	1·46	132
76 Towns - -	29·7	16·3	1·89	144
103 Towns - -	27·3	14·6	1·41	135
Oxford - -	20·4	13·1	0·58	95

In the event of a non-resident being admitted to any of the following Institutions situated in the City, viz., Radcliffe Infirmary, Eye Hospital, City Hospital, St. John's Hospital, or the Warneford Asylum, and dying there, the death is excluded, while the death of an Oxford resident occurring in the Small Pox Hospital, Headington Workhouse, or Littlemore Asylum, which are not in the City, is included in the nett death-rate.

The age and sex distribution is slightly more favourable to life in Oxford than it is in England and Wales as a whole, and for purposes of comparison, the Oxford death-rate should be multiplied by 1·026. The following is a list of the tables dealing with the Vital Statistics of the City :—

I. Population, &c., at time of 1901 Census.

The Colleges and Halls situated within the Oxford Poor Law Incorporation constitute a separate parish, the area of which is included in the areas of the surrounding or adjoining parishes. The parish comprises the following :— Wadham, Christ Church, Pembroke, Balliol, St. John's, Trinity, All Souls, Brasenose, Lincoln, Oriel (part), St. Mary's Hall, Exeter, Jesus, Magdalen, Hertford, New College, Queen's, St. Edmund's Hall, University, New Inn Hall, and Worcester ; while Charsley's Hall, Keble, Corpus Christi, Merton, Oriel (part), and St. Alban Hall, situated in the Headington district, are rated in their corporate character as integral parts of the parishes in which they are situated.

II. Age and sex distribution of the population.

III. Vital Statistics of the whole district for 1903 and previous years.

IV. Deaths and births belonging to the district during 1903, arranged in parishes.

The deaths of residents in Public Institutions have been referred to their proper parishes.

IVa. Causes of death in the different parishes.

V. Deaths in Public Institutions.

VI. Causes and ages of deaths which make up the nett death-rate.

VII. Notifications of Infectious Disease during last ten years.

VIII. Ages of cases notified during 1903.

IX. Districts in which the cases occurred.

X. Districts in which deaths from the seven chief Zymotic Diseases occurred during 1903.

XI. Deaths from some of the more important preventable diseases since 1872.

XII. The Zymotic Death-rate.

Population and Vital Statistics. Tables I. to VI.

Tables I. and II. have been reprinted for the sake of reference.

In Table III. will be found a summary of the vital statistics of the district for the past ten years. The nett death-rate, 13·1, is very low, but against this must be set the fact that the birth-rate is the lowest for the last thirty years. The most striking feature in the table is the exceed-

ingly low infant mortality rate. If we deduct the deaths of the three non-residents, under one year of age, which occurred in the various public institutions in the city, the nett rate will be found to be 94·7.

In Table IV. the births and deaths which make up the nett rate are distributed among the various parishes. As it is impossible to estimate the populations of these small divisions with any degree of accuracy, the census figures for 1901 have been taken which will account for the slight discrepancies between the figures in Tables III. and IV.

In the case of the larger parishes, the death-rates closely approximate those for the whole city, with the exception of St. Thomas', where both the death-rate and infant mortality are rather high. The highest birth-rate is that of St. Ebbe's, viz. 29·4.

In considering the question of infant mortality, it will be interesting to study the various causes of death which go to make up the total. In the following table will be found the deaths under one year of age, calculated per 1,000 births, for the last 29 years. The figures have been taken from the annual reports.

The causes of death have been divided into six headings, viz.:—Infectious diseases, including tuberculosis; Diseases of the respiratory system; Premature birth and congenital defects; Atrophy; Diarrhœa and other diseases of digestive system; and other causes. Such a classification is perforce very rough, but the result is more accurate than would be the case if the causes of death were arranged under less general headings.

Infant Mortality calculated per 1,000 Births.

Year.	Infectious Diseases. 1.	Respiratory Diseases. 2.	Premature Birth. 3.	Atrophy. 4.	Diarrhœa. 5.	Other Diseases. 6.	Total.
1875	14	28	22	32	56	15	167
1876	11	22	12	26	47	20	138
1877	12	29	14	22	29	18	124
1878	18	35	20	37	50	20	180
1879	1	17	16	29	29	12	104
1880	8	26	14	50	53	10	161
1881	21	15	11	35	26	14	122
1882	6	17	27	38	36	12	136
1883	8	28	18	37	34	11	136
1884	19	20	20	28	26	17	130
1885	10	25	30	35	30	13	143
1886	9	25	21	38	39	11	143
1887	3	27	17	42	44	8	141
1888	3	12	19	26	25	17	102
1889	18	21	21	50	30	17	157
1890	12	28	22	40	39	17	158
1891	10	19	24	40	25	27	145
1892	12	28	26	42	23	23	154
1893	4	19	23	50	24	12	132
1894	7	13	17	26	27	14	104
1895	14	25	16	38	27	15	135
1896	19	26	27	32	29	19	152
1897	14	25	25	32	32	10	138
1898	3	27	14	33	37	9	123
1899	16	20	23	39	39	7	144
1900	11	19	19	26	29	12	116
1901	2	18	35	33	30	11	129
1902	13	24	30	32	20	11	130
1903	8	9	30	21	19	8	95

It will be seen that there is, on the whole, a close relationship between the number of deaths from Atrophy and those from Diarrhœa, while there is no such relation between the deaths under Premature birth and Atrophy, although

some of the latter were probably primarily due to the former cause. We shall therefore not be far wrong if we say that a large proportion of the deaths in Cols. IV. and V. were due to unsuitable feeding, while much of the life lost from premature birth might have been saved if the care of the child had been begun long before its birth.

In Table IVa. some of the more important causes of death in the various parishes are given, deaths of residents occurring in public institutions being referred to the parishes in which the persons lived. In studying the figures it must be remembered that persons may suffer with diseases like Consumption and Cancer for many years, and that because they died of them in a particular parish, it by no means follows that they were residing there when they first developed them.

Table VI. gives an analysis of the deaths which make up the nett death-rate.

There is a considerable falling off in the number of deaths from tuberculosis compared to 1902, in which year they were considerably above the average, and the death-rate from respiratory diseases is only 1·6 against 2·33 in the preceding year. Although consumption and the other infectious diseases are classified under the heading "Preventable," it is generally forgotten that there are few diseases and causes of death which cannot be guarded against to a greater or less extent. An unhealthy life not only predisposes people to various diseases, but also reduces their chance of recovery when suffering from them, and in considering how the death-rate may be reduced, it will be necessary to go much further back than the causes of death set forth in the table.

Thus, we find 45 deaths attributed to apoplexy, which is but a result of various diseases, and not a disease in itself, while only one death out of the 657 was registered as due to alcoholism, although there can be no doubt that the

abuse of alcohol contributed, directly or indirectly, to no mean percentage of the total deaths. In dealing with the vital statistics, we must accept and live up to the definition of Hygiene given by Reich. Hygiene is "the philosophy, science, and art of normal life." It has for its object "the care of the whole physical and moral well-being of man, both individually and collectively, and the prevention of disease."

Infectious Diseases. Tables VII.—XII.

From the seven chief Zymotic diseases only 29 deaths occurred during the year, against 45 in 1902. The decrease is mainly due to the fact that measles recurs in a three-year cycle in Oxford, and 20 of the 45 deaths in 1902 were due to that disease. There was a decrease in deaths from Whooping Cough of eight, while those from Diarrhœa increased from three to thirteen. There was, however, a considerable increase in the number of cases of notifiable diseases, the total being 279 against 177 in 1902, due mainly to the prevalence of Scarlet Fever.

The Seven Chief Zymotic Diseases.

Small Pox.

During the past year the disease was brought into the town on two different occasions. In February a tramp was taken ill at a lodging-house a few days after coming into the town. The case was a mild one, and the patient made a good recovery. All the known contacts were at once re-vaccinated, and no further cases arose. On April 1st a journeyman carpenter came into the town suffering from Small Pox. He slept at a small public-house, and after wandering about the town for the greater part of the next day, returned to the village whence he came, where he was isolated. The County Authority at once reported that

the man had been in Oxford, but as he refused to give any information as to his doings beyond saying where he slept, it was only possible to take preventive measures with regard to that one place. No further cases arose in that house, but between the 13th and 17th seven persons developed the disease, all of whom would seem to have been infected by him in Oxford, although two of them were not residents. Of these three had come into contact with him in the Public Library, but it was impossible to ascertain where the other four were infected. In connection with the outbreak eight more cases subsequently arose. Of the 13 residents two died, the disease in one assuming the hæmorrhagic type, while in the other the fatal termination was mainly due to Pulmonary Tuberculosis.

I append the report which I submitted to the Sanitary Committee in August, dealing with certain points in the outbreak.

Vaccination and Small Pox.

At your last meeting I was instructed to report to you upon the evidence obtained, during the recent outbreak of Small Pox, of the value of vaccination and re-vaccination in preventing or modifying the disease.

I have divided the report into three headings :—

I.—The cases.

II.—The people exposed to infection in connection with individual cases.

III.—The members of the hospital and sanitary staff who were brought into contact with the disease.

First, with regard to the cases.

Thirteen patients were treated at the Small Pox hospital. Of these, one had never been vaccinated, eleven had been

vaccinated in infancy only, and one had been vaccinated in infancy and re-vaccinated two days before developing Small Pox. As the incubation period is usually from 12 to 16 days, it is probable that the patient had contracted the disease about a fortnight before re-vaccination.

Since vaccination had in all these cases been performed in infancy, the age of the different patients was practically the same as the number of years which had elapsed since vaccination.

Arranging the cases on this basis we find :—

Vaccinated less than 10 years ago : no cases.

Vaccinated less than 20 years ago : two cases. Both were exceedingly mild, and after the appearance of the true rash they were practically well. In the case of one of them, vaccinated 17 years ago, who had very good marks covering an area of 1·75 sq. in., there were only about 15 spots, and after the initial stage the patient was able to do his usual work, and carry infection all over the town.

Between 20 and 30 years after vaccination, the type of disease was more severe. One patient of 23 had a fair rash, but the papules aborted before arriving at the pustular stage, and there was no secondary fever. The other patient in this group had been vaccinated nearly 30 years previously, and was in a very critical state of health. The rash was very copious, but passed very rapidly to the suppurative stage and then aborted, and by the end of a week the patient was convalescent. In this case re-vaccination had been performed two days before the onset.

In the next group of ten years there were two cases. One with good marks had a mild attack, and though the papules passed through the suppurative stage, the disease ran a mild course. The other patient had two bad marks covering an area of only about 0·25 sq. in. The disease assumed a hæmorrhagic type from the onset and terminated as such cases always do.

Of the remaining six cases, four had been vaccinated more than 40 years previously, and two more than 50 years. In two cases the disease ran a rapid and abortive course. The vaccination scars were very distinct and covered areas of about 1·125 and 0·5 sq. in. respectively. In another case with one small but very good mark, the disease was confluent, but ran a somewhat rapid course. In the remaining three the disease ran an apparently unmodified course, the issue in one case being fatal. It should be remarked, however, that in this case death took place on the 46th day of the illness and was mainly due to pulmonary tuberculosis.

With regard to the unvaccinated case. There were in hospital during the outbreak two patients of the same age, viz. 23. One had been vaccinated in infancy and had good marks, the other had never been vaccinated; both were naturally perfectly healthy. In both the onset was acute, and on admission both had about the same number of spots, but here the similarity ended. In the case of the vaccinated patient only a few more spots came out, which all dried up in a few days without producing any swelling of the face or secondary fever, and the patient was able to be up and about in a few days. In the other case the number of spots rapidly increased and passed through all the typical stages, the pustures being fully developed on the 10th day, at which period the patient felt very ill; the face was a good deal swollen and there was a fair degree of secondary fever. Fortunately the disease was of the discrete form. The former was discharged in 22 days showing but little trace of the disease, the latter went out just under five weeks, cruelly marked.

The risk of death and the degree of suffering is not all. There is also the question, which seems to appeal very strongly to some people, and that is, how much will they be marked?

Where the disease was mild and ran a short course, the patients will bear few or no permanent traces of the disease, and as the severity of the disease varied with the time which had elapsed since vaccination and the size and character of the marks, so did the amount of scarring left by the disease. The patient who bore most traces had never been vaccinated.

On this point at least you can all satisfy yourselves.

With regard to the effect of vaccination and re-vaccination in preventing the disease.

Small Pox as a rule is not very infectious before the rash begins to come out on the third day of the disease. Some cases are very infectious, while in others the infection seems to be very slight and only to last for a day or so.

In the houses from which cases were removed, there were 58 persons, 36 of whom were over ten years of age.

Of these one had recently had the disease, two had been re-vaccinated about a year previously, and one had contracted the disease about two weeks earlier and developed it two days after being re-vaccinated. Of the remaining 32 all but one were promptly re-vaccinated and all escaped.

Of the 22 under ten years of age, two had never been vaccinated. Vaccination, or re-vaccination, was performed in every case, unless the child had been vaccinated fairly recently and had good marks. None of these children developed the disease.

I would point out that in the majority of the cases the patient was removed very shortly after the rash came out and re-vaccination was performed with as little delay as possible. In two cases where the patient had to be left another day before the diagnosis could be made, the other members of the household were vaccinated as a precautionary measure.

In addition to members of an infected house, a very large number of persons were exposed to the disease, and a very large number were re-vaccinated. Of those who were known to have been in close contact with patients after the rash had come out, only a few refused to be re-vaccinated, and one of these contracted the disease.

In all, some hundreds of persons who had been exposed to the infection were re-vaccinated, and, with the exception of one, who had contracted the disease about two weeks previously, not one of them developed Small Pox.

There was one group of contacts with which I will deal separately, viz. those employed in nursing the patients, disinfecting the houses, burying the dead, and so on.

All of them had recently been re-vaccinated, or had had Small Pox, and all of them escaped.

There is no need to remind you how often Small Pox has been conveyed by infected clothing or how much mischief has been caused in connection with the burial of those who have died with the disease, but exposure of this sort is a mere nothing compared to being shut up in an infected area for nearly three months, as some members of the hospital staff were. During the outbreak eight persons were employed at the hospital for periods varying from three to eleven weeks, and not a single one of them showed any signs of the disease.

Those who have never seen a bad case of Small Pox cannot form any idea of what nursing such a case means. The patient must be kept very clean, the eyes, nose and throat must be washed out frequently, and this means that the nurses' hands must be covered with the discharge from the pustures and their faces spluttered all over while they are cleaning the patients' mouths and throats, and all the time they must be inhaling the horrible stench with which such cases are associated. And this goes on, hour after

hour, day after day, week after week. There is no going out for an afternoon when you are on Small Pox duty.

No precautions of any sort whatever to protect themselves were taken by the staff; the nurses had their meals in the wards if they were too busy to go to their own quarters, and the caretaker's little child wandered about with the convalescent patients.

To sum up :—

The severity of the attack and the amount of subsequent scarring was very much affected by the number of years which had elapsed since vaccination and the size and character of the marks.

Vaccination and re-vaccination were promptly carried out in all the infected houses, and with the exception of one patient who had contracted the disease some time previous to the re-vaccination there were no secondary cases.

A very large number of persons exposed to the disease were re-vaccinated and all escaped. Very few contacts refused to be re-vaccinated and one of them developed the disease.

No member of the sanitary or hospital staff contracted the disease.

The outbreak shows how easy it is for anybody to be exposed to Small Pox without their knowledge, and the danger of putting off vaccination and re-vaccination until the disease is known to be in the town.

The outbreak fully justified the action of the Local Authority in providing a special hospital for Small Pox, and, thanks to their foresight, the work at the City Hospital, at a time of considerable pressure, could be carried on as usual.

Scarlet Fever.

An examination of Table VII. will show that since 1897 the number of cases of Scarlet Fever per annum has been

very small, and in 1902 there were signs that the disease was likely to be more prevalent. Last year there were 175 cases reported, one of which terminated fatally, corresponding to a fatality of 0·57 per cent. The type of the disease was upon the whole very mild, but it must be remembered that the disease is one which often leaves its mark behind. Table VIII. brings out the well-known fact that Scarlet Fever is essentially a disease of childhood, and as those who have reached adult life are very unlikely to take the disease, it is most important to keep children out of the way of infection.

Of the 175 cases no less than 161 were treated at the City Hospital.

The expense of treating so many cases, many of them of an exceedingly mild type, in hospital, is considerable, but it must be remembered that it would be impossible to secure the isolation of the majority of them at home in accordance with the Act.

Not only would it mean that the wage-earners would in many cases be put to the expense of obtaining lodgings, but the other children would have to be away from school for upwards of two months. The patients also require good food, plenty of fresh air, and constant supervision, and in the majority of instances these conditions can only be obtained by removing them to hospital.

As to the distribution of the disease. Cases were grouped round certain schools and certain streets, but there was no reason to consider that the disease was spread otherwise than by personal contact. A great deal of mischief was caused by the mild character of the disease, as its true nature was often overlooked, and infectious children were found attending school and playing in the streets.

Diphtheria.

This disease showed a most satisfactory falling off, only 63 cases being reported. Of these only one terminated fatally, corresponding to a fatality of 1·58 per cent.

The disease tends to hang about old infected districts, and Cowley St. John and St. Giles contributed two-thirds of the cases. There was a slight increase of cases in a portion of the parish of St. Aldate's, most of the cases coming from one street.

Measles.

There were only a few cases and no deaths. Beginning in 1893 the disease has recurred in a three-year cycle. Roughly speaking, the disease tends to recur epidemically in large communities at intervals of from two to four years, while in small communities, especially in rural districts, the intervals are less regular and longer. There are, however, so many discrepancies, that Hirsch disbelieves in any definite periodicity.

Whooping Cough.

The number of deaths fell from 18 in 1902 to 10, corresponding to a mortality of 0·20 per 1,000. The figure compares favourably with other towns. See Table XII.

Fever.

Excluding the cases which arose outside and were brought into the City for treatment, only eight cases of Enteric Fever were notified during the year. Of these two terminated fatally. In the Cowley St. John case the child had been ill only a short time, and the diagnosis was only made on the day that it died. No evidence could be obtained as to where it contracted the disease, and it was the only case reported from East Oxford during the year. The St. Giles' case would seem to have contracted the disease away from Oxford. There were three cases in a home

in St. Peter-le-Bailey. Two of them would seem to have contracted the disease when returning to Oxford from a holiday, while the third case was that of a young girl who attended to the first two cases before they were removed to the Radcliffe Infirmary. Of the three cases in St. Aldate's, one child probably contracted the disease away from Oxford, and in another case the water supply was contaminated. No source of infection could be discovered in the third case, which ended fatally.

In all the cases, except that in Cowley St. John, the nature of the disease was confirmed by the examination of the blood, and they were all, with the exception of the last named, removed to the Radcliffe Infirmary or a nursing home.

Diarrhœa.

Diarrhœa is a symptom and not a disease. Of the 13 deaths registered under this heading, three were over 75 years of age. Epidemic Diarrhœa or Zymotic Enteritis is a definite, specific disease, while Diarrhœa is a symptom in many pathologic conditions. In a small community the number of deaths registered under this heading is likely to be very misleading.

Bacteriological Work.

The following specimens have been examined during the year :—

	1st Qr.	2nd Qr.	3rd Qr.	4th Qr.	Total.
For Enteric Fever ...	1	1	2	8	12
For Pulmonary Tuberculosis	7	5	8	6	26
For Diphtheria—					
A—Cases in Hospital	27	28	20	16	91
B—Cases in the town	56	21	16	25	118
Total	91	55	46	55	247

There was a considerable falling off in the number of specimens examined for Diphtheria compared with last year, due to the fact that the disease was much less prevalent. The work of examining the throats of all children attending Elementary Schools from houses from which a case of Diphtheria has been removed, before allowing them to return to school, has been continued.

Corporation Hospitals.

Fever Hospital.

In Hospital, Jan. 1st, 1903, 14 cases.

" " Dec. 31st, 1903, 44 cases, viz. Scarlet Fever, 39, Diphtheria, 5.

During the year, 161, or 92 per cent. of the cases of Scarlet Fever notified in the district were removed to hospital. Only one of these died, corresponding to a fatality of 0·62 per cent.

Of the 63 cases of Diphtheria arising in the district, 55 or 87 per cent. were treated in the hospital. Of these one died, corresponding to a fatality of 1·82 per cent.

In addition to the above a child was brought by its parents to the hospital from outside the district. The child was suffering with Diphtheria, and only lived a short time after admission.

Small Pox Hospital.

14 cases were admitted during the year. Of these two died, death in one case being mainly due to Pulmonary Tuberculosis.

The Matron wishes to thank many kind friends for very welcome presents of toys, books, cakes, and clothes during the past year. Gifts of old toys and cast-off children's clothes will be always gratefully received.

Water Supply.

The water supplied to the District from the City Waterworks has been satisfactory throughout the year. The following figures have been taken from the monthly Reports of the Public Analyst to show the quality of the water at different seasons of the year. The figures indicate quantities as grains per gallon :—

	Feb.	April	July	Nov.
Total Dissolved Solid Matter -	23·5	19·6	22·4	22·68
Chlorine as Chlorides - -	1·3	1·1	1·2	1·1
Ammonia, free and Saline -	·001	·004	·001	·003
,, Albuminoid - -	·005	·006	·005	·005
Nitrogen as Nitrates - -	·210	·182	·161	·266
,, Nitrites - -	0	0	0	0
Oxygen required to Oxydise Organic Matter in 3 hours -	·025	·015	·023	·038

Factory and Workshop Act.

The notices served during the past year may be classified as follows :—

Sanitation.—Three notices were served for dirty premises.

Retail Bakehouses.—In two instances premises were found to be dirty and notices were served.

Sanitary Conveniences.—One notice was served to provide separate accommodation for the two sexes.

Notices from H.M. Inspector.—No notices were received during the year.

Underground Bakehouses.—At the end of the year there were five underground bakehouses in the City. The use of one was discontinued ; in the case of the other four application was made for a certificate to continue their use

in accordance with Section 101. In one instance the certificate was granted at once, and in the other three, after certain alterations had been carried out to the satisfaction of the City Engineer.

Home Work.—153 circulars were sent to occupiers of Factories and Workshops calling attention to the provisions of the Act relating to Home Work.

Lists were received as follows:—

	February.			August.			Total.
	Makers of Wearing Apparel.	Cabinet Makers.	Total.	Makers of Wearing Apparel.	Cabinet Makers.	Total.	
No. of Lists received	38	2	40	25	1	26	66
,, Employers represented on ditto	38	2	40	25	1	26	66
,, Workers ,,	445	2	447	379	3	382	829
,, Contractors ,,	9	2	11	5		5	16

19 extracts from the above, containing names and addresses of 73 out-workers in February, and 69 in August, and one contractor on each occasion, were forwarded to the Clerk of the Local Authority of the district in which they resided.

Infectious Disease.—Only one case of notifiable disease was reported in the house of an out-worker, the illness being Small Pox. All the work in the house was disinfected and returned to the employer, and no more work was sent to the house until all danger of infection was over.

The Inspector's Report.

This report deals at length with the work done in the removal of nuisances, disinfection, &c. Information will

also be found with regard to the work done in removal of house refuse, road scavenging, public bathing places, &c., the inspection of slaughter houses, dairies and milkshops, and common lodging-houses, and the carrying out of various Acts.

I have the honour to be, Gentlemen,

Your obedient Servant,

A. L. ORMEROD, M.A., M.D.,

D.P.H. (Oxon), M.R.C.P.,

April, 1904. *Medical Officer of Health.*

TABLE I. Population 1901 Census.

Civil Parish.	Area in Statute Acres.	Houses.				Population.	
		Inhabited.	Uninhabited.		Building.	1891.	1901.
			In occupation.	Not in occupation.			
Binsey . . .	425	14	...	...	...	78	54
Cowley St. John .	603	2427	46	69	19	8668	11061
Holywell . .	249	143	1	8	1	709	710
Oxford University, Colleges & Halls	...	77	2	...	...	252	279
St. Aldate . .	533	1066	27	22	27	4091	4883
St. Clement . .	531	692	28	30	...	3533	3365
St. Ebbe . .	48	978	36	27	...	4964	4486
St. Giles . .	1430	2449	90	81	31	10548	11877
St. John . .	9	32	1	2	...	91	83
St. Martin and All Saints . .	12	96	56	2	2	633	452
St. Mary Magdalen	42	318	45	15	...	1733	1377
St. Mary-the-Virgin	12	50	10	2	...	224	206
St. Michael . .	15	130	90	7	...	592	586
St. Peter-in-the-East	86	91	13	6	5	497	366
St. Peter-le-Bailey .	11	136	45	7	...	695	656
St. Thomas . .	712	1785	36	28	...	8434	8895
Unnamed . .	1	...	...	...	...	...	...
City of Oxford .	4719	10484	526	306	85	45742	49336

TABLE II. Age and Sex distribution of the Population.

	All ages.	0–	5–	10–	15–	20–	25–	35–	45–	55–	65–	75–	85–
Persons	49336	4742	4715	5190	5247	4777	7649	6207	4791	3321	1897	693	107
Males	21827	2390	2357	2601	2245	1884	3083	2704	2095	1375	794	273	26
Females	27509	2352	2358	2589	3002	2893	4566	3503	2696	1946	1103	420	81

TABLE III. Vital Statistics of the whole District.

Year.	Population estimated to middle of each year.	Births.		Total deaths registered in the district.				Total deaths in Public Institutions in the district.	Deaths of non-residents registered in Pub. Inst. in the district.	Deaths of residents registered in Pub. Inst. beyond the district.	Nett deaths at all ages belonging to the district.	
				Under 1 year of age.		At all ages.						
		Number.	Rate.	Number.	Rate per 1000 births registered	Number.	Rate.				Number.	Rate.
1	2	3	4	5	6	7	8	9	10	11	12	13
1893	46548	1284	27·6	170	134·0	765	16·4	...	47	...	718	15·4
1894	46907	1166	24·9	128	109·8	664	14·2	108	38	26	652	13·9
1895	47266	1244	26·3	164	131·5	781	16·5	111	36	19	764	16·1
1896	47626	1188	24·9	180	151·5	796	16·7	123	46	33	783	16·4
1897	47986	1174	24·5	153	130·0	754	15·4	148	49	10	715	14·9
1898	48346	1160	24·0	140	120·5	674	13·9	118	...	...	662	13·7
1899	48706	1094	22·3	159	145·5	824	16·9	135	55	19	788	16·2
1900	49066	1151	23·2	137	119·0	720	14·7	126	37	34	717	14·6
1901	49426	1132	23·0	147	129·5	687	13·9	143	28	27	686	13·9
1902	49786	1110	22·3	148	133·3	764	15·3	163	68	30	726	14·6
Average of ten years.	48166	1170	24·3	153	130·7	743	15·4	131	45	25	721	14·9
1903	50146	1024	20·4	100	97·6	681	13.5	141	52	28	657	13·1

Rates in Columns 4, 8, and 13 calculated per 1000 of estimated population.

TABLE IV. Births and Deaths distributed among Parishes.

Civil Parish.	Population, 1901.	Births.		Deaths.						Deaths under 1 year, rate per 1000 births.
		Number.	Rate.	0–	1–	5–	65–	Total	Rate.	
Binsey - -	54	1	18·5	...	...	2	1	3	55·5	...
Cowley St. John -	11061	260	23·5	27	5	55	57	144	13·0	104
Holywell - -	710	7	9·8	...	...	5	...	5	7·0	...
Oxford Univ. (part) -	279	...	...	...	...	4	3	7	25·1	...
St. Aldate - -	4883	128	26·2	8	4	25	17	54	11·1	63
St. Clement - -	3365	83	24·7	6	4	28	12	50	14·8	72
St. Ebbe - -	4486	132	29·4	13	7	26	16	62	13·8	99
St. Giles - -	11877	179	15·1	12	9	55	68	144	12·1	67
St. John - -	83	...	...	...	...	1	...	1	12·0	...
St. Martin and All Saints - -	452	4	8·8	2	...	...	...	2	4·4	500
St. Mary Magdalen -	1377	22	16·0	2	2	11	10	25	18·1	91
St. Mary-the-Virgin -	206	1	4·8	...	...	...	...	...	...	...
St. Michael - -	586	13	22·2	...	...	4	5	9	15·3	...
St. Peter-in-the-East-	366	...	...	...	...	1	3	4	10·9	...
St. Peter-le-Bailey -	656	6	9·1	2	...	5	7	14	21·3	333
St. Thomas - -	8895	188	21·1	25	7	47	54	133	14·9	133
City of Oxford -	49336	1024	20·75	97	38	269	253	657	13·3	95

TABLE IVa.

Cause of death.	Binsey.	Cowley St. John.	Holywell.	Oxford University.	St. Aldate.	St. Clement.	St. Ebbe.	St. Giles.	St. John.	St. Martin.	St. Mary Magdalen.	St. Mary-the-Virgin.	St. Michael.	St. Peter-in-the-East.	St. Peter-le-Bailey.	St. Thomas.	Total deaths in Public Institutions in the District.
Small Pox	...	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...
Measles	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1
Whooping Cough	...	...	...	...	3	...	3	3	...	...	...	...	...	...	...	1	...
Diphtheria	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	2
Enteric Fever	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	3
Epidemic Influenza	...	2	...	...	...	1	1	4	...	...	1	...	1	...	...	3	...
Diarrhœa	...	1	...	...	2	1	1	2	...	1	...	...	...	...	...	5	1
Enteritis	...	2	...	...	...	...	1	...	...	...	...	...	...	...	...	1	...
Other septic diseases	...	2	...	...	1	1	...	1	...	...	1	...	...	...	...	...	4
Phthisis	...	18	2	1	5	6	6	12	1	...	...	...	...	...	...	9	6
Other tubercular diseases	...	3	...	...	2	1	1	2	...	...	...	...	...	...	...	2	4
Cancer	...	8	2	1	6	6	4	17	...	...	1	...	1	2	2	9	9
Bronchitis	...	10	...	...	2	5	6	8	...	...	1	...	...	...	2	9	5
Pneumonia	...	6	...	...	5	1	1	6	...	...	2	...	...	...	...	13	6
Pluerisy	...	...	...	...	...	...	...	1	...	...	...	...	1	...	...	...	1
Other respiratory diseases	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	2	...
Alcoholism, &c.	...	...	...	...	...	...	1	1	...	...	1	...	...	...	...	...	...
Venereal diseases	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Premature birth	...	9	...	...	3	3	2	4	...	1	...	...	...	...	1	4	1
Diseases & accidents of Parturition	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
Heart diseases	1	19	...	...	7	7	8	17	...	...	4	...	1	...	1	14	9
Accidents	2	2	...	...	..	2	1	1	...	...	1	...	1	...	...	6	10
All other causes	...	60	1	5	16	16	25	63	...	..	12	...	4	2	7	55	80
Total	3	144	5	7	54	50	62	144	1	2	25	...	9	4	14	133	141

TABLE VI. CAUSES AND AGES OF DEATHS WHICH MAKE UP THE NETT DEATH-RATE.

No.	Disease.	Ages.												Total for Quarters.				
		0–	1–	5–	10–	15–	20–	25–	35–	45–	55–	65–	75–	85–	1st	2nd	3rd	4th	Totl.
1	Small Pox (*a*) Vaccinated	...	...	...	...	...	...	1	...	1	...	...	...	...	...	2	...	...	2
3	Scarlet Fever	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
5	Epidemic Influenza	...	...	...	...	...	...	1	2	...	3	4	2	1	9	1	1	2	13
6	Whooping Cough	5	5	...	...	...	...	...	...	...	...	...	...	...	7	2	...	1	10
7	Diphtheria	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
8	Enteric Fever	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	1	1	2
10	Diarrhœa, Dysentery	5	2	1	...	...	...	...	...	...	...	. .	2	1	...	2	6	3	11
11	Epidemic Enteritis	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	2
15	Tetanus	2	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	2
18	Syphilis	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1	...	...	1
23	Pyæmia	1	2	...	...	1	...	...	2	1	...	...	...	...	...	...	3	4	7
27	Rheumatic Fever	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...	1
28	Rheumatism of Heart	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	1
29	Tuberculosis of Brain	1	1	...	...	2	...	...	...	...	...	...	...	...	1	1	1	1	4
30	Tuberculosis of Larynx	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1	...	1
31	Phthisis	1	3	...	1	4	10	17	11	7	3	3	...	...	13	17	13	17	60
32	Abdominal Tuberculosis	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...	1
33	General Tuberculosis	1	...	...	...	...	1	1	...	...	...	...	...	...	2	1	...	...	3
34	Other Forms of Tuberculosis	...	...	...	...	...	1	...	...	1	...	...	...	...	1	...	1	...	2
42	Chronic Alcoholism	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	...	...	1
45	Osteo-Arthritis	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	1
47	Cancer	...	...	...	...	...	2	1	7	8	14	19	6	2	15	17	17	10	59
48	Diabetes Mellitus	...	...	...	...	...	...	1	...	1	...	...	...	...	...	1	...	1	2
51	Anæmia	...	...	...	...	...	...	...	...	2	...	...	...	...	1	...	...	1	2
53	Premature Birth	27	...	...	...	...	...	...	...	...	...	...	...	...	8	4	8	7	27
55	Debility at Birth	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	2	3
57	Congenital Defects	4	...	...	...	...	1	...	...	...	...	...	...	...	2	2	1	...	5
58	Want of Breast Milk	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
59	Atrophy, Debility, &c.	19	...	...	...	...	...	...	...	...	...	...	...	...	4	7	5	3	19
60	Dentition	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2
61	Rickets	...	3	...	...	...	...	...	...	...	...	...	...	...	...	2	...	1	3
62	Old Age	...	...	...	...	...	...	...	...	...	...	14	28	14	25	12	7	12	56
63	Convulsions	3	2	...	...	...	...	...	...	...	...	...	...	...	1	1	2	1	5
64	Meningitis	1	3	...	...	1	...	1	...	...	1	...	...	...	1	1	...	5	7
66	Apoplexy	...	...	...	...	...	...	...	1	5	12	15	11	1	13	12	10	10	45
67	Softening of Brain	...	...	...	...	...	...	...	1	...	2	7	2	...	...	4	3	5	12
68	Hemiplegia	...	...	...	...	...	...	...	...	...	...	4	...	...	1	...	1	2	4
69	General Paralysis of Insane	...	...	...	...	...	1	...	3	1	...	...	...	...	3	...	1	1	5
70	Other Forms of Insanity	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1	1
71	Chorea	...	...	...	1	...	...	...	...	...	...	...	...	...	..	...	...	1	1
73	Epilepsy	...	...	...	...	...	...	1	1	1	1	1	...	...	1	1	2	1	5
74	Laryngismus Stridulus	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
76	Paraplegia	...	...	...	...	...	...	...	2	1	2	1	...	...	2	...	3	1	6
77	Other forms of Brain Diseases	...	...	...	...	...	...	1	1	...	...	...	...	...	1	1	...	...	2
78	Otitis	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1
82	Endocarditis	...	...	1	...	...	...	1	...	1	2	...	1	...	2	4	...	...	6
85	Aneurism	...	...	...	...	...	...	...	1	...	...	1	1	...	2	...	...	1	3
87	Embolism, Thrombosis	...	...	...	...	...	...	1	...	...	1	3	...	...	1	2	2	...	5
90	Morbis Cordis, &c.	...	...	...	...	2	2	1	3	7	12	23	19	1	13	13	14	30	70
91	Laryngitis	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
94 95	Bronchitis	2	2	1	1	...	...	...	1	1	5	9	15	6	18	9	8	8	43
96 97 98	Pneumonia	7	5	1	...	1	...	2	1	2	8	5	2	...	14	4	3	13	34
99	Emphysema, Asthma	...	...	...	...	...	...	...	...	...	1	...	...	1	1	1	...	...	2
100	Pleurisy	...	...	1	...	...	...	...	...	...	...	1	...	...	...	2	...	...	2
105	Ulcer of Stomach	...	...	...	...	1	1	...	...	...	...	...	..	...	1	...	...	1	2
106	Other Diseases of Stomach	6	...	...	...	...	...	...	...	...	1	...	2	...	1	1	2	5	9
107	Enteritis	3	1	...	...	...	...	...	...	...	...	...	...	...	...	1	3	...	4
108	Appendicitis	...	...	1	1	...	...	...	...	1	...	...	...	...	1	1	...	1	3
109	Obstruction of Intestine	...	1	...	...	...	...	...	...	1	...	3	1	...	2	3	1	...	6
110	Other Diseases of Intestine	...	...	...	...	...	...	1	...	1	...	2	1	...	1	1	1	2	5
111	Cirrhosis of Liver	...	...	...	...	...	...	...	...	...	3	...	1	...	2	...	1	1	4
112	Other Diseases of Liver	...	...	...	...	...	...	...	...	...	3	...	...	...	...	...	3	...	3
113	Peritonitis	...	...	...	1	...	...	...	...	...	2	...	...	...	...	3	...	...	3
115	Diseases, Lymphatic System & Glands	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	...	1
116	Acute Nephritis	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
117	Bright's Disease	...	...	...	...	...	...	...	1	1	8	5	4	...	4	5	6	4	19
119	Diseases of Bladder and Prostate	...	...	...	...	...	...	...	...	...	...	1	1	1	1	1	...	1	3
120	Other Diseases of Urinary System	...	...	...	...	...	1	...	...	1	...	...	...	...	1	1	...	...	2
123	Diseases of Uterus	...	...	...	...	...	...	1	1	...	...	...	...	...	...	1	...	1	2
129	Placenta Prævia	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	...	1
132	Arthritis, Ostitis, Periostitis	...	...	...	1	...	...	...	...	...	1	...	...	...	1	...	...	1	2
133	Other Diseases of Osseous System	...	...	1	...	...	...	1	...	...	...	...	...	...	1	1	...	...	2
135	Eczema	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
	Accidents and Negligence.																		
139	In Vehicular Traffic	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	...	...	1
142	In Building Operations	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	1
145	Burns and Scalds	...	1	...	1	...	...	...	...	...	...	...	...	...	1	...	...	1	2
150	Drowning	...	...	...	1	2	1	...	...	1	2	...	...	...	1	2	3	1	7
151	Suffocation, Overlaid	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
154	Weather Agencies	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1	...	...	1
155	Otherwise not stated	...	...	...	1	...	...	...	...	...	...	1	1	...	1	...	1	1	3
168	Illdefined, and unspecified causes	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	1
	Total	97	38	8	10	15	21	34	42	50	89	124	101	28	190	154	140	173	657

TABLE V. Deaths in Public Institutions.

A.—Residents, included in nett death-rate.

Name of Institution.	1st Quarter	2nd Quarter.	3rd Quarter.	4th Quarter.	Total.
Radcliffe Infirmary - -	9	8	8	14	39
St. John's Hospital - -	...	2	1	1	4
City Hospital - - -	1	...	...	1	2
Small Pox Hospital - -	...	2	...	...	2
Eye Hospital - - -	...	...	1	...	1
Warneford Asylum - - -	...	...	1	2	3
Littlemore Asylum - -	6	6	1	4	17
Oxford Workhouse - -	13	5	13	9	40
Headington Workhouse - -	3	1	2	3	9
Total	32	24	27	34	117

B.—Non-residents, excluded from nett death-rate.

Name of Institution.	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	Total.
Radcliffe Infirmary - -	8	13	11	15	47
St. John's Hospital - -	1	...	...	...	1
City Hospital - - -	1	...	...	...	1
Eye Hospital - - -	1	...	...	...	1
Warneford Asylum - -	...	...	1	1	2
Total	11	13	12	16	52

TABLE VII. Notification of Infectious Disease during last 10 years.

Name of Disease.	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903
Small Pox - -	...	4	24	...	...	...	...	1	1	14
Scarlet Fever -	309	196	125	47	28	40	39	42	66	175
Diphtheria - -	66	80	46	19	30	91	131	122	76	63
Typhoid Fever -	18	15	24	30	32	11	24	5	5	8
Erysipelas - -	38	40	23	32	47	28	36	27	28	19
Puerperal Fever -	3	...	4	3	9	3	5	2	1	...
Total	434	335	246	131	146	173	235	199	177	279

TABLE VIII. Ages of Cases notified during 1903.

Name of Disease.	0–	1–	5–	15–	25–	65–	Total.
Small Pox - -	...	...	1	3	10	...	14
Scarlet Fever - -	1	36	116	19	3	...	175
Diphtheria - -	1	14	37	10	1	...	63
Typhoid Fever -	...	...	4	4	...	...	8
Erysipelas - -	1	2	1	3	8	4	19
Total	3	52	159	39	22	4	279

TABLE IX. Distribution of cases of Notifiable Diseases during 1903.

Parish.	Notified.						Removed to Hospital.			
	Small Pox.	Scarlet Fever.	Diphtheria.	Typhoid Fever.	Erysipelas.	Total.	Small Pox.	Scarlet Fever.	Diphtheria.	Total.
Binsey . .	...	...	...	...	...	...	...	...	...	...
Cowley St. John	4	53	27	1	4	89	4	49	26	79
Holywell . .	...	6	...	...	...	6	...	6	...	6
Oxford University (part) .	...	2	2	...	...	4	...	2	...	2
St. Aldate .	1	11	10	3	1	26	1	10	10	21
St. Clement .	...	4	1	...	1	6	...	1	1	2
St. Ebbe . .	3	23	...	...	...	26	3	22	...	25
St. Giles . .	1	25	15	1	7	49	1	24	13	38
St. John . .	...	...	...	...	...	...	...	...	...	...
St. Martin and All Saints .	...	...	4	...	...	4	...	...	3	3
St. Mary Magdalen . .	2	10	...	...	...	12	2	9	...	11
St. Mary-the-Virgin . .	...	1	...	...	...	1	...	1	...	1
St. Michael .	2	...	1	...	...	3	2	...	1	3
St. Peter-in-the-East . .	...	2	...	...	...	2	...	2	...	2
St. Peter-le-Bailey . .	...	2	...	3	...	5	...	2	...	2
St. Thomas .	1	36	3	...	6	46	1	33	1	35
Total . .	14	175	63	8	19	279	14	161	55	230

In addition to the above, 4 cases of Typhoid Fever and 1 of Diphtheria were admitted to the Radcliffe Infirmary from outside the district, and 1 of Diphtheria to the City Hospital.

TABLE X. Deaths from the Seven Chief Zymotic Diseases.

Parish.	Small Pox.	Measles.	Scarlet Fever.	Whooping Cough.	Diphtheria.	Typhoid Fever.	Diarrhœa.	Total.
Binsey . . .	...	...	...	...	...	...	...	...
Cowley St. John . .	...	...	...	...	...	1	1	2
Holywell . . .	...	...	...	...	...	...	...	...
Oxford Univ. (part) .	...	...	...	...	...	...	...	...
St. Aldate . . .	...	...	...	3	...	1	2	6
St. Clement . .	...	...	...	...	...	...	1	1
St. Ebbe . . .	1	...	...	3	...	...	1	5
St. Giles . . .	...	...	1	3	1	...	2	7
St. John . . .	...	...	...	...	...	...	...	...
St. Martin and All Saints	...	...	...	...	...	...	1	1
St. Mary Magdalen .	1	...	...	...	...	...	...	1
St. Mary-the-Virgin .	...	...	...	...	...	...	...	...
St. Michael . . .	...	...	...	...	...	...	...	...
St. Peter-in-the-East .	...	...	...	...	...	...	...	...
St. Peter-le-Bailey .	...	...	...	...	...	...	...	...
St. Thomas . .	...	...	...	1	...	...	5	6
Total . .	2	...	1	10	1	2	13	29

Diarrhœa. One of the St. Aldate's and one of the St. Giles' deaths occurred at the Oxford and Headington Workhouses respectively.

TABLE XI. Deaths from some of the preventable Diseases.

Year.	Small Pox.	Scarlet Fever.	Diphtheria.	Croup and Laryngitis.	Fever.	Enteric Fever.	Diarrhœa.	Dysentery.	Measles.	Whooping Cough.	Tuberculosis.	Respiratory Diseases
1872	9	16	10	2	2	5	28	1	4	4	99	88
1873	1	...	4	11	6	11	41	2	1	26	117	112
1874	...	...	18	15	4	6	39	...	13	4	111	83
1875	...	1	19	5	3	8	40	...	...	16	107	119
1876	...	11	7	2	6	12	37	...	4	9	104	57
1877	...	35	9	7	2	11	17	...	22	1	106	103
1878	...	11	9	3	3	9	54	...	7	29	109	149
1879	...	2	13	5	...	7	9	...	1	6	100	93
1880	...	8	7	2	...	4	47	...	12	2	91	136
1881	1	14	6	4	...	9	17	...	28	22	73	94
1882	4	84	6	4	...	8	25	...	3	13	56	104
1883	1	9	3	6	...	7	19	...	...	8	82	121
1884	...	3	2	4	...	15	21	...	11	34	82	91
1885	...	3	4	1	...	5	17	...	26	6	87	123
1886	1	1	3	2	...	4	23	...	16	16	104	111
1887	...	3	5	1	...	7	31	...	7	12	69	133
1888	...	...	1	2	...	5	16	...	4	2	67	78
1889	...	1	5	...	...	1	32	...	41	11	65	105
1890	...	6	...	...	...	2	21	...	10	13	98	145
1891	...	5	3	1	...	1	12	...	24	5	79	138
1892	...	...	23	5	...	1	11	1	3	36	83	145
1893	...	6	32	9	...	2	14	...	25	...	74	103
1894	...	2	23	3	...	3	10	...	...	2	80	75
1895	...	...	14	4	...	1	23	...	...	24	79	135
1896	...	2	5	5	...	4	23	...	52	18	66	100
1897	...	...	2	2	...	6	20	...	4	23	65	114
1898	...	...	5	3	...	2	27	1	...	4	61	113
1899	...	...	3	1	...	...	22	...	38	9	66	102
1900	...	...	2	2	...	4	13	...	2	17	74	126
1901	...	...	3	3	...	...	13	...	...	1	56	110
1902	1	1	2	1	...	...	3	...	20	18	81	116
1903	2	1	1	...	...	2	13	...	...	10	71	81

TABLE XII. The Zymotic Death-rate

PER 1,000.

	England & Wales.	76 Towns.	103 Towns.	Oxford.
Small Pox - -	0·02	0·03	0·02	0.04
Scarlet Fever -	0·12	0·14	0·12	0·02
Measles - -	0·27	0·36	0·29	0·00
Whooping Cough	0·27	0·33	0·28	0·20
Diphtheria - -	0·18	0·20	0·16	0·02
Fever - -	0·10	0·12	0·11	0·04
Diarrhœa - -	0·50	0·71	0·43	0·26
Total	1·46	1·89	1·41	0·58

SANITARY INSPECTOR'S REPORT, 1903.

Sanitary Inspector's Office,
Oxford,
March, 1904.

To the Members of the City Council.

GENTLEMEN,

I beg to submit my annual report for the year 1903.

During the year 430 houses were inspected, and frequent visits have been made to the Yards, Courts, and Passages within the City. The necessary steps were taken to procure the abatement of such nuisances as were found to exist. This number does not include the numerous re-inspections, to ascertain whether notices served with respect to nuisances, had been complied with, and visits to the premises, during the time the various works were in progress.

The notices served for the abatement of nuisances number 657, being, 395 Inspector's warning notices, and 262 Statutory notices issued by the Sanitary Committee after my reports.

With respect to the compliance with the above notices, in many instances pressure had to be applied; legal pro-

ceedings were only necessary in two instances, viz., one overcrowded house, and one defective roof. The Magistrates made orders for the nuisances to be abated, the defendants to pay the costs of the proceedings. In the case of overcrowding, the occupiers removed to a larger house, and in the other the necessary repairs were executed.

In two cases that were pending at the end of last year, viz., one of overcrowding, and one of dirty and dilapidated premises; the Magistrates made orders for the notices to be complied with within one month, the defendants to pay the cost of the proceedings.

Housing of the Working Classes Act.

Under the above, 19 houses were reported to the Sanitary Committee. Notices were served on the respective owners calling upon them to make their premises fit for human habitation, or to discontinue their use as dwelling-houses.

Three of the notices were complied with, the houses being made fit for human habitation. In ten instances it was necessary to institute legal proceedings against the owners, calling upon them to show cause why the houses should not be closed. The Magistrates made orders for 9 of the houses to be closed, and the remaining case was adjourned for one month, the owner in the meantime putting the premises in tenantable repair. In each instance the defendants were ordered to pay the costs of the proceedings. As regards the remaining 6, four of the houses are undergoing repairs, and the other two are under consideration.

During the past year the notices served for the abatement of nuisances have been as follows :—

Requirements of Notices.	Notices from Inspector	Notices from Committee
	No. of Houses affected.	
To make premises fit for human habitation, or discontinue their use as dwelling houses		19
To cleanse, repair, and whitewash premises	39	64
To cleanse, repair and whitewash rooms	4	9
To put premises in a proper state of repair	5	10
To repair roofs	4	15
To repair and limewash washhouses	18	53
To repair and limewash closets	18	52
To abate overcrowding	1	4
To put drains in a proper state of repair	29	7
To lay new drains	3	1
To clear drains	218	27
To fix syphon traps to drains to receive waste pipes from scullery sinks	12	12
To fix new closet pans	37	11
To repair water fittings and supply closets with a sufficient flush of water	111	26
To supply houses with a pure and wholesome supply of water	24	16
To remove accumulations of manure	12	1
To remove accumulations of refuse	8	
To remove swine kept contrary to the By-laws	5	1
To repave yards	9	38
To abate other nuisances	27	49

Complaints.

238 Complaints have been received and attended to during the year. Of these 9 were found upon investigation to refer to premises on which no nuisance was found. In the other instances, the necessary steps were taken to procure the abatement of the nuisances.

Drain Testing.

House drains have been tested, with the smoke and peppermint vapour test, in 8 instances. Four were found to be defective. This number appears small compared with the number of notices served for defective drainage, but in the majority of cases it was not necessary to apply the test, the defects being of a superficial character. Notices served upon the owners, requiring them to have the drains put in a sanitary condition, were complied with.

Water Supply.

Seven samples of pump-water, supplying 35 houses, have been submitted to the Public Analyst, who certified that they were unfit for drinking or domestic use. Notices were served on the owners requiring them to supply the houses with a pure and wholesome supply of water, and to do all such works as may be necessary for that purpose. In all cases the supply of water was obtained from the City Waterworks.

Removal of House Refuse, Sweepings, &c.

For the purpose of collecting and removing house refuse, the City is divided into two districts; the refuse from one district is removed on Mondays, Wednesdays, and Fridays, and from the other on Tuesdays, Thursdays, and Saturdays.

The principal streets are swept daily, the others on alternate days.

677 Notices to householders and occupiers of premises have been distributed during the year, calling their attention to the Regulations with respect to the removal of House Refuse.

The number of loads removed during each month of the year is shown in the following table :—

Month.	House Refuse.	Sweepings.	Total.
January	1,067	1,178	2,245
February	1,041	655	1,696
March	1,335	937	2,272
April	1,163	438	1,601
May	1,243	655	1,898
June	947	528	1,475
July	907	459	1,366
August	873	535	1,408
September . . .	1,139	724	1,863
October	968	872	1,840
November . . .	1,296	954	2,250
December . . .	1,051	1,018	2,069
Totals .	13,030	8,953	21,983

The average number of loads of house refuse removed per day is nearly 42, whilst on two occasions, viz., Feb. 16th and March 9th, 55 loads were removed. With regard to sweepings the average per day is about 30. The heaviest days were Jan. 22 and 23, 97 and 107 loads respectively, December 8 and 9, 115 and 97 respectively.

The average weight of a load of house refuse is 25 cwt., giving a total of 15,787½ tons for the year.

During the past 13 years about 16 miles of streets have been added to the district, the mileage in 1891 being 38, while at the present time it is approximately 54. Several new streets are in course of construction.

The accompanying table compares the number of loads removed during 1903, with previous years :—

Year.	Number of Loads removed.		Total.
	House Refuse.	Sweepings or Mud.	
1891	7,200	4,874	12,074
1892	8,108	5,227	13,335
1893	8,973	6,145	15,118
1894	9,582	6,609	16,191
1895	10,484	6,811	17,295
1896	10,659	6,982	17,641
1897	10,976	7,003	17,979
1898	11,048	7,105	18,153
1899	11,905	7,454	19,359
1900	12,474	8,520	20,994
1901	12,604	8,919	21,523
1902	12,905	8,923	21,828
1903	13,030	8,953	21,983

It will be seen that the increase in the number of loads of house refuse collected during the past 13 years is 6,830 and of street sweepings 4,079.

It is interesting to note that notwithstanding this large increase during the past 13 years, only four additional sweepers are now employed, showing the advantage of employing younger and more efficient men for this work.

The figures mentioned in the foregoing tables do not include the removal of snow.

The following is a comparative statement of the estimate

and expenditure of Scavenging and Removal and Disposal of House Refuse :—

Year.	Estimate.	Expenditure.
	£	£
1891—1892	4,197	4,098
1892—1893	4,446	4,398
1893—1894	4,302	4,209
1894—1895	4,349	4,156
1895—1896	4,346	4,265
1896—1897	4,400	4,327
1897—1898	4,393	4,209
1898—1899	4,349	4,343
1899—1900	4,724	4,922
1900—1901	4,875	5,513
1901—1902	5,240	5,444
1902—1903	5,400	5,381
1903—1904	5,480	5,564*

* Estimated and includes two months' increase of wages.

The above figures include the cost of converting cart-sheds into five stables and one storehouse, and the purchase of horses, carts, &c.

The street sweepers, carters, &c., in the employ of the Sanitary Department, having applied for an increase of wages, enquiries were made as to the rate of wages paid in other towns, and of local firms respecting the wages of carters. The result of these enquiries showed that the wages paid in Oxford were under the average. On the recommendation of the Committee, the Council sanctioned an increase, which will involve an additional expenditure of about £300 per annum.

Isis Street Yard.

The plant has been materially increased during the last few years, and now consists of 23 Dust carts, 18 Mud

carts, 15 Water vans, 2 Snow ploughs, 4 Street sweeping machines, 13 Handcarts, and 14 Wheelbarrows, the total value being £1,065. The stud at present numbers 24 against 11 in 1891, at which time it was necessary to hire several horses and carts. We are now in a position to carry on the whole of the work connected with Scavenging and Removal of House Refuse without the necessity of hiring. This is found to be a great advantage owing to the fact that the men are under direct control.

Public Conveniences.

The public urinals in the City are regularly cleansed several times during each week-day, and once on Sunday morning.

The Underground Conveniences have been open to the public as under :—

Rewley Road St. Clement's	Weekdays, 7 a.m. to 11.30 p.m. Sundays, 9 „ „ 10.30 „	
St. Giles	Weekdays, 6 „ „ 11.30 „	
„	Sundays, 6 „ „ 10.30 „	

The following table shows the amount of cash collected during the year :—

Convenience.	Lavatories.	W.C's.	Total.
	£ s. d.	£ s. d.	£ s. d.
St. Giles'. .		30 15 5	30 15 5
Rewley Road .	3 16 6	18 3 3	21 19 9
St. Clement's .	1 19 0	21 10 4	23 9 4
£	5 15 6	70 9 0	76 4 6

There are ten public conveniences in the City; four of these are of recent date (underground), one of which is under the control of the Market Committee. The others are of an antiquated type, and are not all that could be desired, either as regards their position or structure. The Committee have had these under consideration for some time, and hope in the near future to reconstruct some of the existing ones, or build new ones, but great difficulty is experienced in obtaining suitable sites.

Canal Boats Acts, 1877 and 1884, and Regulations of the Local Government Board.

Under these Acts and Regulations 65 Canal Boats have been inspected during the year. The boats were found to be clean, and in a satisfactory condition, and were with few exceptions kept in accordance with the regulations.

There were 65 men, 35 women, and 37 children on the boats inspected. The ages of the children were as follows:—

Girls.		*Boys.*	
Under 1 year	= 1	Under 1 year	= 1
1 to 5 years	= 5	1 to 5 years	= 5
5 „ 10 „	= 0	5 „ 10 „	= 11
10 „ 12 „	= 1	10 „ 14 „	= 13
	7		30

The contraventions met with were as under:—

Absence of certificate	One.
Cabins overcrowded	Two.
Without proper water vessel	One.

Preliminary notices were given to the owners, and complied with.

On April 22nd, Owen J. Llewellyn, Esq., H.M. Inspector under the Canal Boats Acts, made his annual inspection, for the purpose of making enquiries as to the execution of the Acts and Regulations within the district, and after examining the register and Inspector's journal, he expressed himself satisfied with the work done.

Moveable Dwellings.

163 Vans used as dwellings, attending the fairs held in the City, have been inspected. No cases of Small Pox or other infectious disease were discovered. I am pleased to say that there is a continued improvement in the condition of the Vans since they have been regularly inspected. The following table gives the particulars of the inspections at each fair :—

Fair.	Vans used as dwellings.	Luggage wagons.	Men.	Women.	Children.
Gloucester Green .	32	35	63	29	37
St. Giles . . .	122	170	264	131	123
St. Clement's . .	9*	12*	15	9	9
	163	217	342	169	169

* The owners were asked to remove their vans from the streets into private yards, and readily complied with the request.

Sale of Food and Drugs Acts.

As Inspector under the above, I have procured 68 samples and submitted them to the Public Analyst.

The result of the analyses are shown in the following table :—

Article.	No. Analysed.	Genuine.	Adulterated.
Butter	14	14	
Chewing Wax	1		1 (1)
Chocolate Chips	1	1	
Coffee	6	6	
Demerara Sugar	5	4	1 (2)
Ground Ginger	2	2	
Lard	10	10	
Margarine	8	8	
Milk	10	6	4 (3)
Mustard	2	2	(4)
Pepper	8	8	
Sago	1	1	
Totals	68	62	6

(1) *Chewing Wax.* Contained 23·7 % solid paraffin. Sold in a wrapper marked "For chewing only. This is not to be eaten. Refined wax used in this preparation." The vendor was cautioned.

(2) *Demerara Sugar.* A dyed sugar known as "Yellow Crystals." Vendor was cautioned, and promised to discontinue sale of same.

(3) *Milk.* (*a*) Deficient in fat 4 %. Proceedings taken. Case dismissed.
(*b*) Deficient in fat 3 %. Vendor cautioned.
(*c*) Contained 11 % of added water. Proceedings taken. Case dismissed.
(*d*) Contained 25 % added water. Sold as skim milk. Vendor cautioned.

(4) *Mustard.* One contained 10 % of flour, and some turmeric. (Sold as a mixture.)

In addition to the above-mentioned, 4 samples of milk were submitted to the Public Analyst by private persons.

H. M. Inspector of the Board of Agriculture, Joshua Cornelius, Esq., visited Oxford on April 29th, for the

purpose of making enquiries as to the execution of the Sale of Food and Drugs Acts.

Margarine Act.

One Shop-keeper was cautioned for exposing for sale Margarine, not marked in accordance with the Act, and also for not having in his possession paper wrappers marked "Margarine," for the delivery of the same to the purchaser.

Unsound Food.

The undermentioned articles of food have been destroyed during the year, as being unfit for the food of man :—

Meat	-	-	-	28 lbs.
Apples	-	-	-	½ bushel.
Oranges	-	-	-	50.
Bananas	-	-	-	160.
Cherries	.	-	-	9 lbs.

Dairies, Cowsheds, and Milkshops Order.

There are 72 Cowkeepers, Dairymen, and Purveyors of Milk on the Register.

One person has been registered during the year, and one has been withdrawn.

Their premises have been frequently inspected.

Slaughter-houses.

The registered and licensed Slaughter-houses within the City have been frequently inspected, and were kept in accordance with the By-Laws.

There are 25 registered and 3 licensed Slaughter-houses on the Register.

Registered Common Lodging-houses.

330 Inspections of the Common Lodging-houses within the City have been made during the year. As a rule they have been well kept, their condition and management being satisfactory.

There are 3 Common Lodging-houses on the Register, with a total of 20 rooms, which are certified to accommodate 66 lodgers.

One application for a house to be registered was refused, the house being considered unsuitable for the purpose.

During the prevalence of Small Pox in the City and district, the registered Lodging-houses and other houses where travellers resort were inspected each day to ascertain the health of the inmates. It is satisfactory to record that no case was discovered.

Houses let in Lodgings.

There are a number of houses within the City let to the casual class in single tenements or furnished rooms. These have been under the consideration of the Sanitary Committee for some time, and the question of By-Laws for the registration and inspection of such houses has been referred to the By-Laws Committee.

Bathing Places.

The Public Bathing Places, Tumbling Bay (Male), Long Bridges, 2 (Male and Female), and St. Ebbe's (Male), were

open to the public free of charge, from May 1st to September 30th as follows:—

Week-days.

During May, June and July, from 6 a.m. to 8.30 p.m.
„ August „ „ „ 8.0 „
„ September „ „ „ 7.0 „

Sundays.

Tumbling Bay	from 6 a.m.	to	12 noon.
Long Bridges (Males)	„	„	10 a.m.
„ „ (Females)	„	„	„
St. Ebbe's	„	„	„

On Mondays and Wednesdays from 2.30 to 4.30 p.m., and all day on Fridays, Tumbling Bay Bathing Place was reserved for the use of Females only.

St. Ebbe's Bathing Place is restricted to boys of 13 years of age and under.

*

Summerfields Bathing Place, River Cherwell, was, by kind permission of Dr. Williams, open to the public from August 3rd to September 12th inclusive:—

Weekdays, from 7 to 10 a.m., and from 5 to 8 p.m.
Sundays, „ 7 „ 10 „

The wearing of bathing drawers was compulsory during the evenings.

The Bathing Places generally were not so much frequented this year, owing to the cold and unsettled weather, and on more than one occasion were closed owing to floods.

Free Ferry.

The Free Ferry, Long Bridges, was open to the public as follows :—

During	January	from	9	a.m. to	5.0	p.m.
„	February	„	„	„	5.30	„
„	March	„	„	„	7.15	„
„	April	„	„	„	8.0	„
„	May	„	6	„	8.30	„
„	June	„	„	„	9.15	„
„	July	„	„	„	„	„
„	August	„	„	„	8.30	„
„	September	„	„	„	7.30	„
„	October	„	9	„	6.0	„
„	November	„	„	„	5.0	„
„	December	„	„	„	„	„

On behalf of the freeholders, and to prevent any claim as a public right of way being made, the Free Ferry and path leading thereto were closed on Monday, November 9th.

Infectious Diseases.

In all cases where the Medical Officer certified that the whitewashing and cleansing of premises would tend to prevent or check the spread of infectious disease, notices were served and the necessary works carried out.

Disinfection of Premises, Rooms, &c.

488 Rooms were disinfected during the year. The following articles were removed and disinfected :—

Beds and Mattresses - -	445
Pillows and Bolsters - -	526
Blankets - - -	481
Carpets - - - -	60
Articles of Clothing, &c. - -	2,245
Total	3,757

A person suffering with Small Pox having been in certain rooms in the Public Library, the whole building was closed, on the recommendation of the Medical Officer of Health, for one week, during which time it was thoroughly cleansed and disinfected by the Sanitary staff.

The Water Closets and Drains in various streets, and in the yards, courts, and passages, have been disinfected frequently during the summer months.

Prevention of Consumption.

51 Rooms have been disinfected with a view to aid in the above.

I am, Gentlemen,

Your obedient Servant,

THOS. J. HULL,

Sanitary Inspector.